

Grazing Corn

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Grazing is the cheapest form of feed for cattle. While perennial grasses and alfalfa are reliable components to a grazing system, another component could be corn.

Grazing corn is an option for a couple of situations: 1) as a bridge crop when pasture renovation is needed, and 2) as an insurance crop in an overall grazing system.

Pasture Renovation

Pastures that are heavily infested with weeds might require total renovation. Corn and the herbicides used for corn can help to greatly reduce the amount of weeds in a field. If the farmer wanted to seed the pasture in the fall, then the corn should be grazed in August/September at about the time that corn is typically chopped for silage. If the pasture seeding will occur in the spring, then the corn can be grazed in the fall or winter.

Most corn herbicides allow grazing corn, including atrazine. Many herbicide labels require a waiting period as long as 60 days before grazing corn is allowed. Several herbicides do not allow grazing. Herbicides that DO NOT allow grazing corn include Princep (simazine) and Simazat (simazine) and Distinct. Consult *AGR-6: Weed Control Recommendations for Field Crops* for more information.

Insurance Crop

Cattle farmers trying to rely on grazing for most of the feed supply may want corn as an insurance crop. If the weather turns unfavorably dry during the summer and the pastures play out, green corn is a feeding option. Corn grazed in the winter can extend the grazing season.

One study compared a total of 156 steers which were from local stockyards. All steers were treated for BRD complex, dewormed, and implanted with Synovex. All steers were preconditioned together on September 27, 2000. Steers were randomly allocated by weight to one of two feeding groups: 1) grazing corn, or 2) commodity feeding. Steers were sold based on weight. The grazing corn group strip-grazed 11.8 acres of corn. Grain yield was 173 bu/A and dry matter yield was 9.25 tons/acre. The commodity feed was a mixture of free choice hay, soybean hulls and corn gluten feed.

Average daily gain was nearly similar between the two groups and gross returns per head were nearly similar (Table 1). Feed costs for the commodity feed group were half of the costs for the commodity feed group. Due to the similarities in the other categories, net returns were higher for the grazing corn group than the commodity feed group.

Table 1. Comparison of steers on grazing corn versus commodity feed.

	Grazing Corn	Commodity Feed
Feed Cost	\$30.79	\$61.53
Average Daily Gain	1.52	1.58
Average Gross per Head	\$69.05	\$70.74
Net Return per Head	\$28.14	(\$3.29)

Source: ID-152 Grazing Corn: An Option for Extending the Grazing Season in Kentucky

Grazing Efficiency and Cattle Performance

Grazing efficiency has been recorded to be around 70 to 90%, with slightly higher efficiencies for strip grazing. Dry weather is helpful to successful corn grazing. Grazing efficiency will drop dramatically if the weather is unusually wet and many of the corn ears lie on the wet ground. Unusually wet conditions also will lead to soil compaction, which could complicate subsequent pasture seeding.

Average daily gain of cattle decreased as grazing efficiency increased, so producers should target 80% grazing efficiency for the best combination of corn utilization and cattle performance. There is a lag time between when cattle are first turned into a standing corn field and when the cattle recognize the standing corn plants as the primary feed source. Cattle new to grazing corn typically will graze the green weeds before they graze the corn. However, once cattle graze the corn, they will graze only it until the corn is gone.

Raising Corn for Grazing Corn

Successful grazing corn requires high corn yields. The keys to high corn yields include proper lime and fertilizer rates, good hybrids, correct seeding rates, timely planting, and effective pest control. Soil sampling should be done to determine the proper amount of lime and fertilizer. Each year, the University of Kentucky tests over 100 hybrids at seven locations across the state to assess hybrid performance. Each year, hybrids from several companies rank near the top. Yield performance is not necessarily related to seed price.

Corn should be planted between April 1 to May 1 in western Kentucky and between April 15 and May 15 in central and eastern Kentucky. Soil temperatures should be above 50 degrees Fahrenheit at a 2-inch depth for 3 to 4 days. Planting depth is 1.5 to 2 inches depending on moisture and temperature. Corn should be planted at a target population of 22,000 to 30,000 plants per acre depending on soil productivity.

Weed control is a must for good corn yields, and for helping remove weeds for subsequent pasture renovation. Seedling insects can be controlled with seed treatments or in-furrow insecticides. Most corn seed is treated with a fungicide to help against seedling diseases.

Summary

Grazing corn has provided gains similar to commodity feeds. Grazing corn could be an alternative feed source, especially on farms without grain handling facilities. Corn should be planted and managed similar to any other field corn.